

Marion County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Marion County economy.¹

These 21 sectors have a total direct output of approximately \$323.7 million and support 1,210.6 jobs in Marion County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Marion County Economy								
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product		
Direct Effect	1,210.6	22.14%	\$124,915,411.65	31.99%	\$323,704,964.60	82.89%		
Indirect Effect	209.9	3.84%	\$28,859,292.76	7.39%	\$41,346,523.14	10.59%		
Induced Effect	199.6	3.65%	\$14,088,950.49	3.61%	\$25,645,524.40	6.57%		
Total Effect	1,620.0	29.62%	\$167,863,654.90	42.98%	\$390,697,012.14	100.04%		

As shown in the above table, agriculture, food, and food processing sectors support 1,620 jobs, or 29.62% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$390.7 million, roughly 100.04% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately \$167.9 million, or 42.98% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 42.98% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **818.8 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Marion County.

Top Ten Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	818.8	\$138,942,596.14			
Grain farming	78.0	\$44,186,753.86			
All other food manufacturing	75.1	\$28,461,104.97			
Wholes ale trade	63.7	\$12,574,735.40			
Support activities for agriculture and forestry	62.3	\$17,157,104.88			
All other crop farming	60.8	\$7,279,050.60			
Fluid milk manufacturing	47.7	\$38,569,059.23			
Veterinary services	31.7	\$2,652,521.04			
Other animal food manufacturing	20.3	\$29,109,958.56			
Monetary authorities and depository credit intermediation	18.8	\$2,999,267.20			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$138.9 million to the Marion County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	818.8	\$138,942,596.14			
Grain farming	78.0	\$44,186,753.86			
Fluid milk manufacturing	47.7	\$38,569,059.23			
Other animal food manufacturing	20.3	\$29,109,958.56			
All other food manufacturing	75.1	\$28,461,104.97			
Support activities for agriculture and forestry	62.3	\$17,157,104.88			
Oilseed farming	7.5	\$13,249,121.17			
Wholesale trade	63.7	\$12,574,735.40			
Owner-occupied dwellings	0.0	\$7,933,710.85			
Dairy cattle and milk production	10.4	\$7,329,797.73			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Marion County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	7.5	\$13,249,121.17			
Grain farming	78.0	\$44,186,753.86			
Vegetable and melon farming	0.4	\$175,576.86			
Greenhouse, nursery, and floriculture production	0.2	\$55,536.38			
Cotton farming	0.3	\$129,835.73			
All other crop farming	60.8	\$7,279,050.60			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	818.8	\$138,942,596.14			
Dairy cattle and milk production	10.4	\$7,329,797.73			
Poultry and egg production	0.5	\$672,180.89			
Animal production, except cattle and poultry and eggs	18.8	\$3,274,337.05			
Commercial logging	1.7	\$99,838.33			
Other animal food manufacturing	20.3	\$29,109,958.56			
Fluid milk manufacturing	47.7	\$38,569,059.23			
Animal, except poultry, slaughtering	3.7	\$2,268,886.14			
Bread and bakery product, except frozen, manufacturing	3.7	\$386,916.62			
Frozen cakes and other pastries manufacturing	0.2	\$31,712.10			
All other food manufacturing	75.1	\$28,461,104.97			
Farm machinery and equipment manufacturing	9.1	\$5,189,562.60			
All other industrial machinery manufacturing	4.4	\$1,089,605.51			
Veterinary services	31.7	\$2,652,521.04			
Landscape and horticultural services	17.2	\$551,013.10			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Marion County, the retail sector was omitted.